

## Bad boys: Research predicts whether boys will grow out of it—or not

November 5 2013

---

Using the hi-tech tools of a new field called neurogenetics and a few simple questions for parents, a University of Michigan researcher is beginning to understand which boys are simply being boys and which may be headed for trouble.

"When young children lie or cheat or steal, [parents](#) naturally wonder if they'll grow out of it," says Luke Hyde, a U-M psychologist who is studying the development and treatment of [antisocial behavior](#).

Hyde, a faculty associate at the U-M Institute for Social Research (ISR) and assistant professor of psychology, is speaking at ISR on November 11 on how genes, experience and the brain work together to heighten or reduce the risks that normal childhood transgressions will develop into full-blown conduct disorders in adolescence and early adulthood. His talk is part of the ISR Research Center for Group Dynamics seminar series on violence and aggression, and is free and open to the public.

"The lifetime prevalence of conduct disorder is around 10 percent, and even higher in males and low-income populations," says Hyde. "The total cost to society is enormous, since these behaviors are often chronic, lasting through adulthood."

With colleagues at U-M, Duke University, the University of Pittsburgh, and other institutions, Hyde has been exploring the role of the environment and biology as they interact over time to shape behavior. In particular, he is using the techniques of a new field called neurogenetics,

which combines genetics, neuroscience and psychology, to learn how genes and neural processes interact with harsh environments, including dangerous neighborhoods and harsh parents, and with a child's own levels of empathy and personality traits, to increase the risk of antisocial behavior.

In one recent study, for example, Hyde and colleagues studied subjects with over-reactive [amygdala](#) responses . The amygdala is an almond-shaped part of the brain's primitive limbic system involved in processing fear and other visceral emotions. It has been associated with impulsive, aggressive behavior, as well as anxiety disorders and depression.

"Previous research suggests that the amygdala becomes over-reactive probably as a result of both genetics and experience," says Hyde. "And once the amygdala is over-reactive, people tend to behave in an anxious, over-reactive way to things they see as a potential threat.

"Our study found that this tendency is moderated by a person's environment, including the social support they get. If they're not getting support from family, friends, neighbors, or professionals, then the link between the amygdala and anxious behavior is much stronger."

In another study, Hyde and colleagues showed that [kids](#) who are impulsive are only at higher risk of engaging in antisocial behavior if they live in [dangerous neighborhoods](#).

He also identified specific items within childhood behavior checklists that can be used as early as the age of three to identify kids who will likely have worse trajectories for anti-social behavior compared to other children who have similar behavior problems, such as throwing tantrums.

These items assess observable behaviors that include whether the child is cruel to animals, doesn't seem to feel guilty after misbehaving, is sneaky,

lies, is selfish or won't share, and won't change his or her behavior as a result of punishment.

"The results of this test aren't really meaningful until age three or three-and-a-half," says Hyde. "Before that, many of these behaviors are fairly common, and don't predict anything. But after age three, if children are still behaving in these ways, their behavior is more likely to escalate in the following years rather than improve."

There is good news, though. Kids who scored high on this test benefitted just as much as other kids from interventions, according to Hyde. These interventions, often called parent management training, focus on giving parents better skills to manage child behavior problems, including training parents to spend more positive time with their kids, use time-outs instead of physical punishments, and reward good [behavior](#) by giving out stickers.

"Parents need to know that intervention works, especially if it's done early," says Hyde. "They need to go for help if they see signs of trouble. Clinical psychologists, among other professionals, have empirically supported treatments that are quite effective for [children](#), especially in this age period."

Provided by University of Michigan

Citation: Bad boys: Research predicts whether boys will grow out of it—or not (2013, November 5) retrieved 20 April 2024 from <https://medicalxpress.com/news/2013-11-bad-boys-itor.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.